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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/728,205	12/01/2000	Charlie Wen-Tsann Chen	DALL13-00004	4432

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EXAMINER

CAO, DIEM K

ART UNIT	PAPER NUMBER
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2194

DATE MAILED: 05/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/728,205

Applicant(s)

CHEN, CHARLIE WEN-TSANN

Examiner

Diem K. Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6-7, 11, 13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,408,663) in view of Kurtzberg et al. (U.S. 360,263 B1).

4. **As to claim 1**, Miller teaches a resource allocator that is operable to allocate a plurality of resources among a plurality of tasks within a process system (method of allocating time and physical resources to tasks constituting a project; col. 2, lines 44-46 and the code ...or the like; col. 8, line 67 – col. 9, line 2), the plurality of resources comprising human resources (workers; col. 2, lines 54-62) and process resources (numbers of machines; col. 2, lines 54-62), and the process system comprising a plurality of application processes (tasks constituting a project; col. 2, lines 45-46), a memory that stores a model of the process system (input data ... the schedule; col. 9, lines 3-4 and resource data table, resource schedule data; col. 6, lines 64-67), the model representing mathematically the plurality of application processes, the plurality of resources, and the plurality of tasks, and defining relationships among related ones thereof (The data ... each task; col. 4, lines 52-58 and The input data ... adjustment policies; col. 9, line 5 – col. 10, line

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16), monitors measurable characteristics associated with ones of the process system, the plurality of application processes, the plurality of resources, and the plurality of tasks (col. 15, lines 46-56 and col. 17, lines 9-14), and modifies ones of the mathematical representations and that allocates ones of the plurality of resources among ones of the plurality of tasks within the process system in response to ones of the monitored measurable characteristics (col. 15, lines 46-50, col. 18, lines 2-6, col. 19, lines 49-56 and col. 21, lines 65-67).

5. However, Miller does not explicitly teach the resource allocator comprising a status monitoring controller and a resource allocation controller. Kurtzberg teaches the resource allocator comprising a status monitoring controller (col. 1, lines 37-45) and a resource allocation controller (col. 1, lines 46-51).

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller and Kurtzberg because the system of Kurtzberg provides a method suitable for optimizing allocation of resources in a multi-processor time-shared computer system.

7. **As to claim 6**, Miller as modified by Kurtzberg teaches the resource controller is operable to reselect one of the allocated ones of the plurality of resources among one of the plurality of tasks within the process system in response to modified ones of the monitored measurable characteristics (col. 15, lines 46-50, col. 18, lines 2-6, col. 19, lines 49-56 and col. 21, lines 65-67).

8. **As to claim 7**, it is the same as the computer product claim of claim 1 except it is the method claim, and is rejected under the same ground of rejection.
9. **As to claim 11**, see rejection of claim 6 above.
10. **As to claim 13**, it is rejected under the same ground of rejection of claim 1.
11. **As to claim 18**, see rejection of claim 6 above.
12. **As to claim 19**, Miller teaches the process system controls one of a manufacturing plant, a refinery, a hotel, a restaurant, a traffic control system, a transportation control system and an emergency services system (col. 1, lines 3-11).
13. **As to claim 20**, Miller teaches the resource allocator is an information management system (col. 2, lines 44-46).
14. Claims 2-3, 8, 12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,408,663) in view of Kurtzberg et al. (U.S. 360,263 B1) further in view of Damiam et al. (U.S. 5,212,791).

15. **As to claim 2**, Miller does not teach the resource allocator further comprising a graphical user interface that is operable to enable supervisory interaction. Damiam teaches the resource allocator further comprising a graphical user interface that is operable to enable supervisory interaction (graphic interface; col. 7, line 60 – col. 8, line 17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg and Damiam because it allows interactive monitoring and adjustment of the schedule by an operator (abstract).

16. **As to claim 3**, Miller does not teach the graphical user interface is operable to facilitate at least one of customer management, network management, transaction management, resource management, and communication management (graphic interface; col. 7, line 60 – col. 8, line 17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg and Damiam because it allows interactive monitoring and adjustment of the schedule by an operator (abstract).

17. **As to claim 8**, see rejections of claims 2 and 3 above.

18. **As to claim 14**, see rejection of claim 2 above.

19. **As to claim 5**, see rejection of claim 3 above.

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20. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,408,663) in view of Kurtzberg et al. (U.S. 360,263 B1) further in view of McCue (U.S. 6,732,140 B1).

21. **As to claim 4**, Miller does not teach the memory further comprises a data repository that comprises at least one of customer database, a network database a transaction database, a resource database, a communication database, a knowledge database and a control database. However, Miller teaches a resource data table (col. 6, lines 64-66). McCue teaches a resource database (col. 4, lines 47-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg and McCue because it provides a method to manage the resources more effectively by using the known-knowledge in the database art.

22. **As to claim 16**, see rejection of claim 4 above.

23. Claims 5, 9-10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (U.S. 5,408,663) in view of Kurtzberg et al. (U.S. 360,263 B1) and McCue (U.S. 6,732,140 B1) further in view of Damiam et al. (U.S. 5,212,791).

24. **As to claim 5**, Miller does not teach the resource allocator is further operable to modify the knowledge database in response to one s of the monitored measurable characteristics thereby enabling the resource allocator to be self-learning. Damiam teaches a dynamic scheduling system

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that utilizes a knowledge base system to dynamically schedule production and the schedule is update dynamically to conserve synergism with the changing plant environment (abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Miller, Kurtzberg, McCue and Damiam because the method taught by Damiam would improve the system of Miller by using the knowledge base to dynamically scheduling tasks in the system.

25. **As to claim 9**, see rejection of claim 4 above.

26. **As to claim 10**, see rejection of claim 5 above.

27. **As to claim 17**, see rejection of claim 5 above.

Response to Arguments

28. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 8:00AM - 3:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Diem Cao



SUE LAO
PRIMARY EXAMINER